

[002] This application claims priority from German Application Serial ♦♦
 No. 102 50 480.6 filed October 30, 2002. ♦♦

[003] FIELD OF THE INVENTION ♦♦

[005] BACKGROUND OF THE INVENTION ♦♦

[014] ~~—— Beginning with an automated multiple-gear transmission of the type~~ ♦♦
 ~~described initially, this objective is achieved by the features specified in the~~ ♦♦
 ~~characterizing portion of Claim 1; advantageous particulars are described in the~~ ♦♦
 ~~subordinate claims.~~ ♦♦

[015] SUMMARY OF THE INVENTION ♦♦

[020] BRIEF DESCRIPTION OF THE DRAWINGS ♦♦

[021] ~~Below, t~~ The invention is explained in more detail will now be described, ♦♦
 by way of example, with reference to the accompanying drawings in which: ♦♦
 ~~drawing which illustrates preferred example embodiments and which shows:~~ ♦♦

[026] DETAILED DESCRIPTION OF THE INVENTION ♦♦

1-11. (CANCELED)

12. (NEW) An automated multiple-gear transmission with an input shaft, a gearwheel assembly to engage gears, via several output paths, an output shaft, and an auxiliary three-shaft planetary assembly, wherein the gearwheel assembly comprises at least four intermediate independent spur gear stages, which are formed as spur gear transmission ratios (i) and which can be connected to two of the three auxiliary shafts of the planetary assembly (PS) directly or via shift control elements (S), such that three shift control elements are engaged for each engaged gear.

13. (NEW) The multiple-gear transmission according to claim 12, wherein a third shaft of the planetary assembly (PS) is connected to the output shaft.

14. (NEW) The multiple-gear transmission according to claim 12, wherein two spur gear transmission ratios (i1, i4) are connected via two shift control elements (SR1, SR) to a first shaft of the planetary assembly (PS), a further spur gear transmission ratio (i2) is connected via a shift control element (S2) to a second shaft of the planetary assembly (PS) and another spur gear transmission ratio (i3) is connected on a primary side via a shift control element both to a drive shaft and to a housing (SB) and on a secondary side both to a first shaft of the planetary assembly (PS) via a shift control element (S5) and to a second shaft of the planetary assembly (PS) via a shift control element (S4).

15. (NEW) The multiple-gear transmission according to claim 12, wherein the planetary assembly is a plus planetary assembly, whose drive takes place at an annular gearwheel, such that spur gear transmission ratios (i1, i4) are in active engagement with a solar gearwheel or with a web, while a spur gear transmission ratio (i2) is in active engagement with the web or the solar gearwheel.

16. (NEW) The multiple-gear transmission according to claim 12, wherein the planetary assembly is a minus planetary assembly, whose drive takes place at a web, such that a spur gear transmission ratios (i1, i2) are in active engagement with a solar gearwheel or with an annular gearwheel, while a second one of the spur gear transmission ratios (i2) is in active engagement with the annular gearwheel or with the solar gearwheel.

17. (NEW) The multiple-gear transmission according to claim 12, wherein the shift control elements are made as form-locking shift control elements designed as synchromeshes or as claw couplings.

18. (NEW) The multiple-gear transmission according to claim 12, wherein the shift control elements are made as frictional change-under-load elements.

19. (NEW) The multiple-gear transmission according to claim 12, wherein the shift control elements are arranged before associated spur gear transmission ratios.

20. (NEW) The multiple-gear transmission according to claim 12, wherein the shift control elements are arranged after associated spur gear transmission ratios.

21. (NEW) The multiple-gear transmission according to claim 12, wherein the transmission comprises a countershaft.

22. (NEW) The multiple-gear transmission according to claim 12, wherein the transmission comprises two countershafts of a same type.